



FACILITY COMPLIANCE INSPECTION REPORT

Division of Waste Management

Solid Waste Section

UNIT TYPE:												
Lined MSWLF		LCID		YW		Transfer		Compost		SLAS		COUNTY: Forsyth PERMIT NO.: 34-06 FILE TYPE: COMPLIANCE
Closed MSWLF	X	HHW		White goods		Incineration		T&P		FIRM		
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF		

Date of Site Inspection: September 11, 2012

Date of Last Inspection: March 12, 2009

FACILITY NAME AND ADDRESS:

Piedmont Sanitary Landfill – Closed
9900 Freeman Road
Kernersville, North Carolina 27284

GPS COORDINATES: N: 36.19361 W: 80.04047

FACILITY CONTACT NAME AND PHONE NUMBER:

Name: Alexander Lacsamana, District Manager, Closed Site Management Group
Telephone: (770) 805-3366 (o) or (404) 354-2693(m)
Email address: alacsama@wm.com

FACILITY CONTACT ADDRESS:

1000 Parkwood Circle, Suite 700
Atlanta, Georgia, 30339

PARTICIPANTS:

Alexander Lacsamana, District Manager
Steve Cowie, Joyce Engineering
Robert Winfield, Joyce Engineering

STATUS OF PERMIT:

Waste Management of the Carolinas, Inc. was issued a Letter of Closure for the Piedmont Landfill on October 29, 2004.

PURPOSE OF SITE VISIT:

Comprehensive Inspection

STATUS OF PAST NOTED VIOLATIONS:

N/A

OBSERVED VIOLATIONS

None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

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ADDITIONAL COMMENTS

1. The facility is located on approximately 108 acres of property with a disposal area of approximately 65 acres.
2. A gate was provided at the entrance to the facility to prevent unauthorized access.
3. The post-closure plan and closure letter were verified.
4. A post-closure plan revision which included a gas to energy project was approved by the Solid Waste Section on April 12, 2011. Inspection found construction of the gas to energy system had been completed and was in operation.
 - Staff from the Waste Management Renewable Energy Division is on site to monitor and maintain this system during normal business hours.
 - **A letter approving the Post Closure Plan Revision required that as-built drawing indicating actual construction be submitted upon completion of the construction activities. A review of records found that no as-built drawings have submitted to the Solid Waste Section as required. Please submit all as-built drawings as required within 30-days of issuance of this inspection report.**
5. Groundwater monitoring was being performed semi-annually as required. Reports for the second semi-annual monitoring event for 2011 and the first semi-annual monitoring event for 2012 were verified.
6. Methane monitoring was being performed quarterly as required. Monitoring records from 2010 through the third quarter monitoring event of 2012 showed that methane was consistently recorded in excess of the lower explosive limit at GP-10.
7. Research of Division records found a letter submitted by Mark R. Snyder, P.E. of Waste Management Southern Group on March 25, 2005 entitled "*First Quarter 2005 Landfill Gas Monitoring Event.*" A copy has been attached to this report.
 - This letter referenced a barhole probe study that was completed on July 27, 2000. The study was conducted to determine if the Piedmont Landfill was or was not the source of the methane exceedances recorded at GP-10. Mr. Snyder proposed that GP-10 be exempt from future notification of LEL exceedances due to the conditions documented within the study.
 - Our records do not include a copy of the study referenced in Mr. Snyder's 2005 letter and the information submitted in the letter did not provide sufficient information to allow for a determination as to the cause of elevated methane levels above the LEL at GP-10. In addition, please submit a copy of the 2000 study referenced in Mr. Snyder's letter and/or any additional information you may have on the elevated methane levels at GP-10.
 - Therefore, within **10 days** of receipt of this report, please contact Jaclynne Drummond, Compliance Hydrogeologist at (919) 707-8294 to discuss the elevated methane levels at GP-10. Additional assessment will be required to further investigate methane migration within the area near GP-10. Corrective actions may also be required to address the elevated methane issue near GP-10. Information may be forwarded via email to jaclynne.drummond@ncdenr.gov or via US Mail to: 1646 Mail Service Center, Raleigh NC 27699-1646.
8. Leachate is collected in five above ground storage tanks located on the opposite side of Freeman Road south of the landfill. Leachate is hauled off-site approximately twice a week according to Mr. Lacsamana and Mr. Cowie.
9. The landfill had a good stand of vegetation at the time of inspection. Mr. Lacsamana explained that the second mowing event had not yet occurred on site which is generally performed in early to late October.
10. No permanent edge-of-waste markers were observed on site. **Within 60-days of receipt of this report, please provide permanent markers that accurately delineate the limits of waste. (See the attached May 29, 2009 Memo: "Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills, Industrial Solid Waste Landfills and Municipal Solid Waste Landfills").**
11. No evidence of significant settling was observed at the time of inspection.
12. No ponding of surface water was observed on the landfill at the time of inspection.
13. All access roads were maintained in good, operational condition. Some slight erosion was observed on the primary access road leading to the top of the landfill. Please ensure that any eroded areas are repaired immediately to prevent damage to the landfill cap.
14. The facility had proper signage.

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Division of Waste Management
Solid Waste Section

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Please contact me if you have any questions or concerns regarding this inspection report.



Charles T. Gerstell

Environmental Senior Specialist

Regional Representative

Phone: (704) 235-2144

Sent on: <u>10/1/12</u>	<input checked="" type="checkbox"/>	Email	<input type="checkbox"/>	Hand delivery	<input type="checkbox"/>	US Mail	<input type="checkbox"/>	Certified No.
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Copies: Jason Watkins, Western District Supervisor
Jaclynne Drummond, Compliance Hydrogeologist
Jessica Montie, Compliance Officer



North Carolina Department of Environment and Natural Resources
Division of Waste Management

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

May 29, 2009

Memorandum

To: Construction and Demolition Landfill Owners and Operators
Industrial Solid Waste Landfill Owners and Operators
Municipal Solid Waste Landfill Owners and Operators

From: Solid Waste Section

Subject: Permanent Edge-of-Waste Markers at Construction and Demolition Debris Landfills,
Industrial Solid Waste Landfills and Municipal Solid Waste Landfills

15A North Carolina Administrative Codes (NCAC) 13B .0540(1) and (2) and 13B .1619(d)(1) require operators and owners of construction and demolition (C&D) landfills, industrial solid waste landfills (ISW) and municipal solid waste (MSW), respectively, to establish and maintain buffers. This requirement is intended to prevent accidental disposal of waste outside permitted disposal units during the active life of the facility and to be able to identify the boundaries of the disposal unit during the post-closure period.

In order to comply with this requirement, effective January 1, 2010 owners and operators of all active, inactive and closed C&D landfill units, ISW landfill units and MSW landfill units shall install and maintain permanent edge-of-waste markers for all landfill units.

Markers shall be placed to clearly delineate the edge-of-waste around the perimeter of every active, inactive and closed disposal area. All markers must be maintained throughout the life of the landfill and throughout the required period of post-closure care. In addition, facility staff should be aware of and be able to show Division staff the permitted boundary of the facility. A compliance survey may be required as per NCAC 13B .0542 (m) and .1604 (b) (2) (M).

If you have any questions concerning this requirement, please contact the Environmental Senior Specialist in your area. See www.wastenotnc.org/swhome/FieldOpMapC.pdf for contact information.



Fac/Perm/Co ID # AL	Date 1, 12, 08	Doc ID# DIN
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WASTE MANAGEMENT SOUTHERN GROUP

2859 Paces Ferry Road
Suite 1600
Atlanta, GA 30339
(770) 805-4130

March 25, 2005

NC Department of Environment and Natural Resources
Division of Waste Management – Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646
Attn: Ms. Sherri Coghill



Subject: First Quarter 2005 Landfill Gas Monitoring Event
Piedmont Landfill and Recycling Center – Kernersville, North Carolina
Permit Number 34-06

Dear Ms. Coghill:

Please find enclosed the results of the 1st Quarter 2005 landfill gas monitoring event at the Piedmont Landfill and Recycling Center, which was completed on January 20, 2005. Ten permanent gas probes, eighteen barhole probes and one structure were monitored during this event. The results of landfill gas monitoring indicate that gas probe GP-10 contained 61.0% methane, which is consistent with previous monitoring results from this probe. Methane was not detected in any other points monitored during this event.

Methane concentrations in excess of the LEL were first observed in GP-10 on July 10, 2000, and it is our understanding that the NC Department of Environment and Natural Resources (NCDENR) was notified of the exceedance at that time. Subsequent to that notification, a barhole probe study was completed on July 27, 2000, which indicated that Piedmont Landfill was not the source of the methane. Based upon the study and the fact that GP-10 is located across the street from the Piedmont Landfill and on the same side of the street as the closed Kernersville Landfill, NCDENR concurred that the methane was not likely coming from the Piedmont Landfill. Unfortunately, formal documentation of this concurrence can not be located in the site files.

With NCDENR approval, Waste Management proposes that routine quarterly monitoring continue as required at the Piedmont Landfill. However, a remediation plan addressing the methane in GP-10 will not be required due to the likely source of methane concentrations observed. Furthermore, we propose that GP-10 be exempt from future notifications of LEL exceedances due to the conditions documented herein. To assist you in your review, please find enclosed a summary of gas monitoring results since the July 10, 2000, initial detection in GP-10, a copy of the July 27, 2000, barhole probe study and a map that shows the location of GP-10 with reference to the Piedmont Landfill and adjacent closed Kernersville Landfill.

If you have any questions regarding the contents of this report, the request contained herein or require additional information, please contact me at (770) 805-3529.

Sincerely,

Waste Management of Carolinas, Inc.

A handwritten signature in black ink, appearing to read "Mark R. Snyder". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Mark R. Snyder, P.E.
Project Manager, Closed Sites

enclosures

cc: Mark Poindexter – Solid Waste Section

MONITORING RESULTS ADDENDUM

Date: 1/20/05

Technician: A. Shemkovitz

Methane Instrument Type: ATX 620

Serial Number: 1705-9494

Calibration Date: 1/20/05

Pressure Instrument Type: PDM-205

Serial Number: 883596

Water Level Instrument: na

Serial Number: na

Monitoring Point	% Methane	Probe Pressure	Time	Comments
BH-1	0.0%	-	15:30	Barhole Probe
BH-2	0.0%	-	15:31	Barhole Probe
BH-3	0.0%	-	15:32	Barhole Probe
BH-4	0.0%	-	15:33	Barhole Probe
BH-5	0.0%	-	15:34	Barhole Probe
BH-6	0.0%	-	15:36	Barhole Probe
BH-7	0.0%	-	15:37	Barhole Probe
BH-8	0.0%	-	15:27	Barhole Probe
BH-9	0.0%	-	14:17	Barhole Probe
BH-10	0.0%	-	14:21	Barhole Probe
BH-11	0.0%	-	14:23	Barhole Probe
BH-12	0.0%	-	14:24	Barhole Probe
BH-13	0.0%	-	14:25	Barhole Probe
BH-14	0.0%	-	14:26	Barhole Probe
BH-15	0.0%	-	14:28	Barhole Probe
BH-16	0.0%	-	14:28	Barhole Probe
BH-17	0.0%	-	14:29	Barhole Probe
Crew Trailer	-	-	-	no longer in use
GP-1	0.0%	0.01	14:55	
GP-2	0.0%	5.7	14:59	
GP-3	0.0%	0.7	15:23	
GP-4	0.0%	0.07	14:47	
GP-5	0.0%	0.27	14:44	
GP-6	0.0%	0.02	14:41	
GP-7	0.0%	0.13	14:37	
GP-8	0.0%	-	14:32	Barhole Probe
GP-9	0.0%	0.01	15:11	
GP-10	61.0%	0.23	15:15	
GP-11	0.0%	0.01	15:19	
Landfill Office	0.0%	-	14:07	outlets, vents, ambient air

1. Methane measured 0-100% by volume.

2. Pressure measured in inches of water column.

Weather Conditions: Overcast, 39F

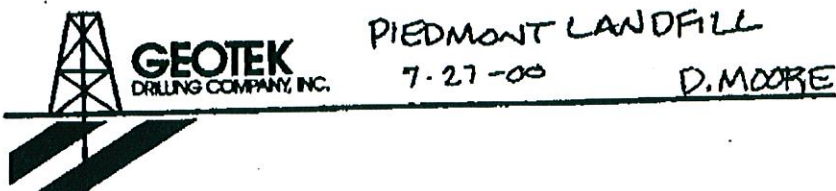
Barometric Pressure: 30.01

BH-1	07/10/00	10/31/00	01/25/01	04/20/01	07/10/01	10/21/01	01/29/02	04/25/02	07/18/02	10/29/02	01/20/03	04/29/03	07/23/03	10/23/03	01/20/04	04/22/04	07/28/04	10/22/04	01/20/05
BH-2	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-8	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-10	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-11	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BH-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Trailer	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
GP-1	0.0	0.0	0.6	0.4	0.0	0.0	0.0	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP-2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	28.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP-3	0.2	0.0	0.0	0.0	0.2	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP-4	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP-6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GP-7	0.0	0.0	0.0																

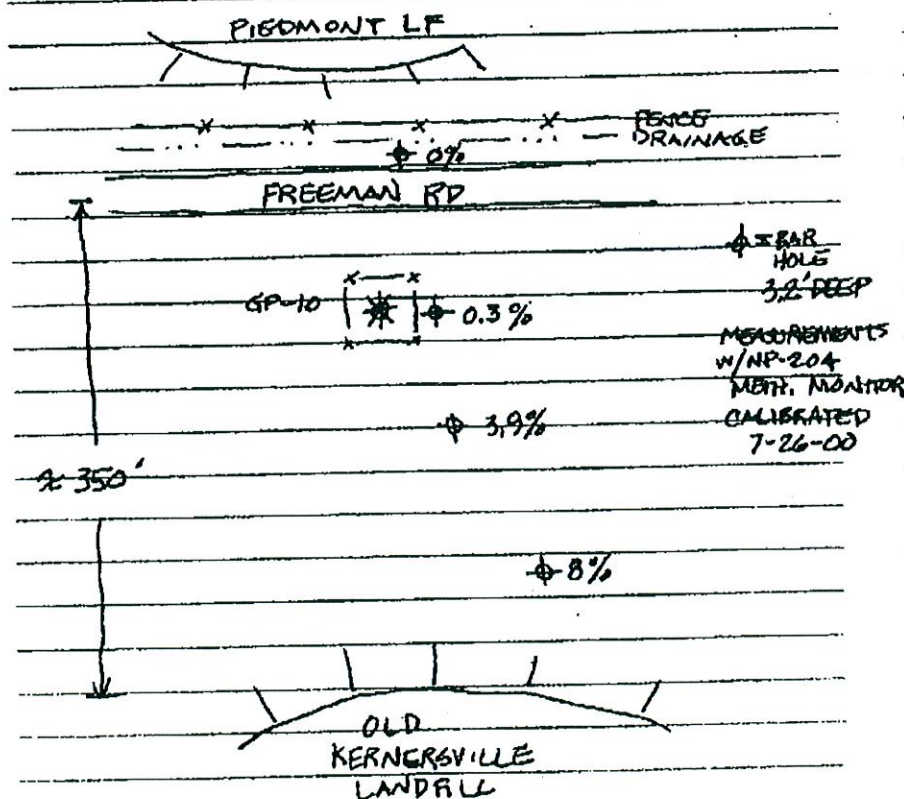
LF Office



JOB PIEDMONT LANDFILL
 JOB NO. 392.03 SHEET NO. 1 OF 1
 CALCULATED BY D. MOORE DATE 7-27-00
 CHECKED BY _____ DATE _____
 SUBJECT METHANE @ GP-10 SCALE NTS



BP 29.4 Overcast
 GP-10 = 44% @ 8:15 AM



NOTE:
 THIS INFORMATION
 DEMONSTRATES
 THAT THE HIGH
 CONCENTRATIONS
 OF METHANE
 DETECTED @ GP-10
 ARE THE RESULT
 OF SUBSURFACE
 MIGRATION COMING
 FROM THE CLOSED
 KERNERSVILLE
 LANDFILL.

ATLANTA, GA
 (770) 416-7148

CINCINNATI, OH
 (937) 299-0548

KNOXVILLE, TN
 (865) 690-0128

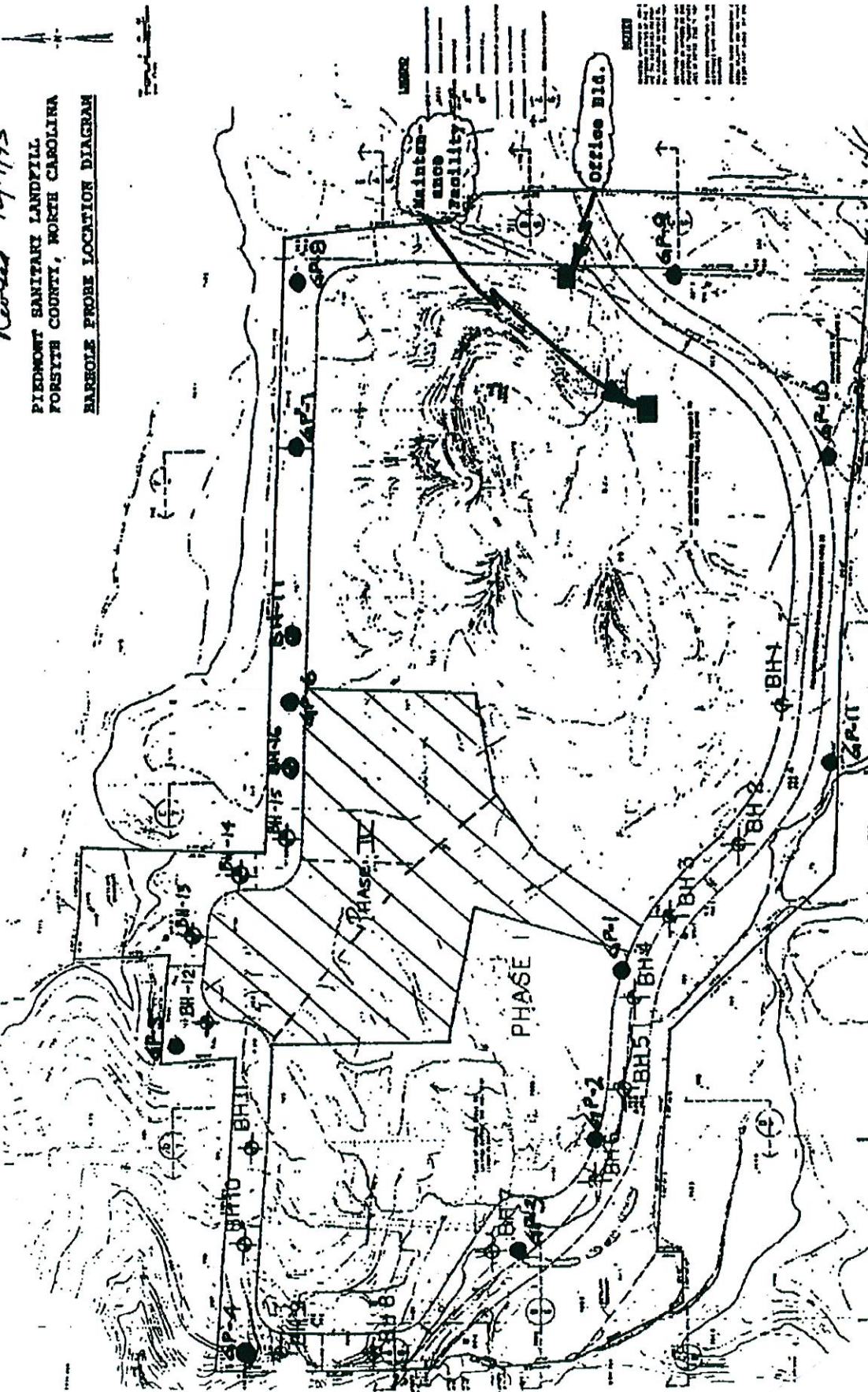
NASHVILLE, TN
 (615) 331-2088

CHICAGO, IL
 (800) 950-0260

CHARLOTTE, NC
 (704) 655-8936

Revised 12/7/93

PIEDMONT SANITARI LANDFILL
FORSTY COUNTY, NORTH CAROLINA
BARRELE PROBE LOCATION DIAGRAM



Closed Kemersville
Landfill